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09/704,595	11/02/2000	Antonius H.M. Akkermans	PHN 17,721	2515

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EXAMINER	
ORTIZ CRIADO, JORGE L	

ART UNIT	PAPER NUMBER
2655	12

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/704,595	AKKERMANS, ANTONIUS H.M.	
	Examiner	Art Unit	
	Jorge L Ortiz-Criado	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-11 and 13-15* is/are rejected.

7)☒ Claim(s) *6 and 12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 July 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: In Fig. 1 ref # 63. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because block in Fig. 1 block 70 is labeled as a "signal generating means" and in the detailed description is decribed as a "means 70", the descriptive label given to black box elements should agree with that found in the detailed description in the specification, otherwise the lack of consistency makes the whole disclosure unclear. If applicant wants to use "means" in the drawings, the specification should also refer to the black box in the same way. So the objection to the proposed drawing correction would be due to a lack of consistency and hence clarity. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1,3-5,7-11,13, and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Gérard et al. U.S. Patent No. 4,561,082.

Regarding claim 1, Gérard discloses a device, for reading and or writing information from/onto an optical information carrier, said information stored in the form of differences in intensity level (See col. 1, lines 39-43), said device comprising:

-read means including imaging means for imaging a radiation beam so as to form a scanning spot by means of which the information carrier is scanned, and including detection means for generating a read signal, which is indicative of the intensity of the radiation reflected from the information carrier at the location of the scanning spot (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10),

-which device has an information transfer mode, in which the scanning spot is moved in a first direction with respect to the information carrier (col. 6, lines 10-16),

-which device has a displacement mode, in which the scanning spot is moved in a second direction transverse to the first direction (col. 5, lines 49-65)(col. 6, lines 21-25),

-control means for controlling the imaging means in response to a measurement signal which is indicative of the degree of focusing of the radiation beam at the location of scanning spot, which control means include sample and hold means for sampling and holding the measurement signal in response to a sample signal (col. 2, lines 39-56)(col. 3, lines 14-68)(col. 5, lines 47-65) (col. 6, lines 21-25)(col. 8, lines 41-67 to col. 9, lines 1-27)(col. 11, lines 33-63) (See Figs. 1,2, 3, 4, 5, 10)

-wherein the sample signal causes the measurement signal to be sampled at locations having mutually the same intensity level. (See col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 2, 3, 4, 5).

Regarding claim 3, Gérard discloses a device for reading and recording information on an optical information carrier, said information carrier having information stored therewithin as patterns formed by differences in intensity levels (See col. 1, lines 39-43; col. 7, lines 8-16; Figs. 1,2,3,4,5,6,9,10), said device comprising:

a read system adapted to read data from said optical information carrier, said read system further comprising a radiation beam source, a radiation beam, a device for focusing said radiation beam, a scanning spot formed with said focused radiation beam and proximate said optical information carrier, said scanning spot having an intensity (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10),

a motion control device for controlling movement of said scanning spot relative to said optical information carrier (col. 6, lines 10-16),

and for generating a read signal (SLS) which is indicative of the intensity of the radiation reflected from the information carrier at the location of the scanning spot, said read system further adapted to derive, from said optical information carrier via said scanning spot, a measurement signal, a radial error signal, and an information signal (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10);

and a signal generation system operatively coupled to said read system, said signal generation system adapted to produce a sample signal to control sampling of said measurement signal, said sample signal proportional to the intensity of said scanning spot, and wherein said sample signal causes the measurement signal to be sampled at locations having mutually the same intensity level (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10);

Regarding claim 9, Gérard discloses a method of reading information stored on an optical information carrier (See col. 1, lines 39-43; col. 7, lines 8-16; Figs. 1,2,3,4,5,6,9,10), said method comprising:

providing an optical information carrier (See col. 1, lines 39-43; col. 7, lines 8-16; Figs. 1,2,3,4,5,6,9,10),

said optical information carrier having a multilevel structure, and said optical information carrier bearing data recorded as patterns formed in the information carrier by differences in intensity levels (See col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

providing a read system adapted to read data from said optical information carrier, said read system further comprising a radiation beam source, a radiation beam, a device for focusing said radiation beam, a scanning spot formed with said focused radiation beam and proximate said optical information carrier, said scanning spot having an intensity (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10),

a motion control device for controlling movement of said scanning spot relative to said optical information carrier (col. 6, lines 10-16),

and for generating a read signal (SLS) which is indicative of the intensity of the radiation reflected from the information carrier at the location of the scanning spot, said read system further adapted to derive, from said optical information carrier via said scanning spot, a measurement signal, a radial error signal, and an information signal; and providing a signal generation system operatively coupled to said read system (See col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

said signal generation system adapted to produce a sample signal to control sampling of said measurement signal, said sample signal proportional to the intensity of said scanning

spot, and wherein said sample signal causes the measurement signal to be sampled at locations having mutually the same intensity level (See col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

Regarding claims 4 and 10, Gérard discloses wherein said intensity of said scanning spot is an indicator of a location of the scanning spot with respect to the patterns provided in the information carrier (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 8, lines 41-67 to col 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10);

Regarding claims 5 and 11, Gérard discloses wherein said sample signal causes the measurement signal to be sampled at instants when said intensity is comparatively high and a periodic clock signal is received by said signal generation system (See col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

Regarding claim 7 and 13, Gérard discloses wherein said read system is adapted to operate in two operational modes:

an information transfer mode wherein said motion control device provides motion of said scanning spot in a tangential first direction with respect to an axis about which said information carrier is rotated (See col. 6, lines 10-16; Figs. 6, 7);

and a displacement mode wherein said motion control device provides motion of said scanning spot in a radial second direction, wherein said radial transverse direction is transverse to said first direction (See col. 5, lines 49-65; col. 6, lines 21-25; Figs. 6, 7).

Regarding claim 8, Gérard discloses wherein said read system further comprises a system for generating a logic signal which indicates that information is recorded on the information carrier in the form of differences in level of a surface of the information carrier (See col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

Regarding claim 14, Gérard discloses wherein said sampling of the measurement signal when said intensity is comparatively high results in a reduction of radial-to-vertical crosstalk (See col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63)

Regarding claim 15, Gérard discloses an apparatus for employing an optical onformation carrier (See col. 1, lines 39-43; col. 7, lines 8-16; Figs. 1,2,3,4,5,6,9,10), said apparatus comprising:

device for reading and recording information on said optical information carrier, said information carrier having information stored therewithin as patterns formed by differences in levels (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10),

a read system adapted to read data from said optical information carrier, said read system further comprising a radiation beam source, a radiation beam, a device for focusing said

radiation beam, a scanning spot formed with said focused radiation beam and proximate said optical information carrier, said scanning spot having an intensity (col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10),

, a motion control device for controlling movement of said scanning spot relative to said optical information carrier (col. 6, lines 10-16),

and a device for deriving, from said optical information carrier via said scanning spot, a measurement signal, a radial error signal, and an information signal (See col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

said signal generation system operatively coupled to said read system, said signal generation system adapted to produce a sample signal to control sampling of said measurement signal, said sample signal proportional to the intensity of said scanning spot, and wherein said sample signal causes the measurement signal to be sampled when said intensity is comparatively high (See col. 1, lines 9-15, lines 36-43; col. 2, lines 39-56; col. 3, lines 24-46; col. 7, lines 8-16; col. 8, lines 41-67 to col. 9, lines 1-27; col. 11, lines 29-63; Figs. 1,2, 3, 4, 5, 6,9,10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gérard et al. U.S. Patent No. 4,561,082 in view of Tateishi U.S Patent No. 5,636,197.

Gérard et al discloses all the limitation of base claim 1 as outlined above. But fail to disclose including means for measuring the time during which the measurement signal is held and means for causing the measurement signal to be sampled when the time exceeds a predetermined value.

However, this feature is well known in the art as evidenced by Tateishi, which disclose means for measuring the time during which the measurement signal is held and means for causing the measurement signal to be sampled when the time exceeds a predetermined value (col. 3, lines 22-46).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gérard et al.'s invention by include means for measuring the time during which the measurement signal is held and means for causing the measurement signal to be sampled when the time exceeds a predetermined value, in order to provide focusing control on an optical information carrier as suggested by Tateishi.

Allowable Subject Matter

5. Claims 6 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed on 07/25/2003 have been fully considered but they are not persuasive.

Applicant argued that Gérard et al. fails to disclose "the control signal to cause the FE to be sampled at locations having mutually the same intensity level and wherein the signal generation system does not receive any input that characterizes the intensity of information read from the optical information carrier", as required by claims 1,3,9 and 15.

The examiner cannot concur because Gérard et al. meets all the limitations of the recited claims. Gérard et al. discloses a signal generation system to cause the FE signal to be sampled, as acknowledge by the Applicant and wherein the signal is sample at locations "such as intertrack areas", wherein the FE signal characterizes the intensity level of the radiation reflected from the optical information carrier by, detecting the signal with a photo detecting element, inputting the detected signal to the signal generating system 12, comparing the signal with a reference value which characterizes the intensity level desired into the FE and to outputting a control signal to then sample the FE signal when two conditions, a clock signal and the desired intensity level are

met. (See col. 5, lines 27-65; col. 8, lines 17-67 to col. 9 lines 1-26, col. 11, lines 57-62, Fig. 1, items 1, Fig. 4,5, Figs 9,10)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L Ortiz-Criado whose telephone number is (703) 305-8323. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm),Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H To can be reached on (703) 305-4827. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6743.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

joc

DORIS H. TO 12/1/03
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